The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.-2. (Canceled)

3. (Currently Amended) A manufacturing method for a semiconductor device, comprising:

forming at least first and second semiconductor layers that are divided from each other in an island-like shape over a substrate having an insulating surface, wherein each of said first and second semiconductor layers includes a region to become at least a channel region of a thin film transistor;

forming a conductive layer covering an entire surface of each of the first and second semiconductor layers with an insulating layer interposed therebetween;

selectively heating the first and second semiconductor layers by irradiating an incoherent electromagnetic wave within a wavelength band ranging at least from a visible light band to an infrared band to thereby conduct heat treatment on each of the first and second semiconductor layers and the insulating layer; and

etching said conductive layer after the selective heating of the first and second semiconductor layers to form at least first and second gate electrodes over the first and second semiconductor layers, respectively,

wherein said conductive layer extends beyond each periphery of the first and second semiconductor layers at least when the selective heating of the first and second semiconductor layers is performed.

4. (Canceled)

5. (Previously Presented) The method according to claim 3 wherein said incoherent electromagnetic wave is irradiated for 30 to 300 seconds.

6.-7. (Canceled)

8. (Previously Presented) A manufacturing method for a semiconductor device according to claim 3, wherein the substrate is glass substrate.

9.-12. (Canceled)

13. (Previously Presented) A manufacturing method for a semiconductor device according to claim 3, wherein the substrate is selected from one of quartz and sapphire.

14.-17. (Canceled)

18. (Previously Presented) A manufacturing method for a semiconductor device according to claim 3, wherein the substrate has a transmittance of 50 % or higher with respect to the electromagnetic wave within the wavelength band.

19.-22. (Canceled)

23. (Previously Presented) A manufacturing method for a semiconductor device according to claim 3, wherein the conductive layer comprises a metal nitride.

24.-27. (Canceled)

28. (Currently Amended) A manufacturing method for a semiconductor device according to claim 3, further comprising forming a second conductive layer on the conductive layer ~~and forming a part of a gate electrode using the conductive layer~~.

29.-32. (Canceled)

33. (Previously Presented) A manufacturing method for a semiconductor device according to claim 3, wherein the selective heating of the substrate is performed at a temperature not lower than a distortion point of the substrate.

34.-35. (Canceled)

36. (Currently Amended) A manufacturing method for a semiconductor device, comprising:

heating an entire surface of a substrate by radiation heating from a first heat source;

forming non-transparent layers that are separated from each other in an island-like shape over the substrate, the non-transparent layers each having a different, higher absorptance with respect to an incoherent electromagnetic wave within a wavelength band ranging at least from a visible light band to an infrared band, than the substrate, the non-transparent layers each covering a first semiconductor layer or a second semiconductor layer; and

locally heating a region where each of the non-transparent layers having the high absorptance with respect to the incoherent electromagnetic wave is formed, by using a second heat source for radiating the incoherent electromagnetic [[wave]] wave,

wherein the first semiconductor layer and the second semiconductor layer are covered by the non-transparent layers when the region is locally heated.

37. (Currently Amended) A manufacturing method for a semiconductor device, comprising:

heating an entire surface of a substrate by radiation heating from a first heat source;

forming a non-transparent layer to overlap with a semiconductor layer formed in an island-like shape through an insulating film over the substrate, the non-transparent layer having a different, higher absorptance with respect to an incoherent electromagnetic wave within a wavelength band ranging at least from a visible light band to an infrared band, than the substrate; and

selectively heating a region where the non-transparent layer having the high absorptance with respect to the incoherent electromagnetic wave is formed, by using a second heat source for radiating the incoherent electromagnetic wave to thereby conduct heat treatment on the semiconductor layer and the insulating layer through conductive heating from the non-transparent layer having the high absorptance with respect to the electromagnetic [[wave]] wave,

wherein the semiconductor layer is covered by the non-transparent layer when the region is selectively heated.

38. (Previously Presented) A manufacturing method for a semiconductor device according to claim 36, wherein the substrate is a glass substrate.

39. (Previously Presented) A manufacturing method for a semiconductor device according to claim 37, wherein the substrate is a glass substrate.

40. (Previously Presented) A manufacturing method for a semiconductor device according to claim 36, wherein the substrate is selected from one of quartz and sapphire.

41. (Previously Presented) A manufacturing method for a semiconductor device according to claim 37, wherein the substrate is selected from one of quartz and sapphire.

42. (Previously Presented) A manufacturing method for a semiconductor device according to claim 36, wherein the substrate has a transmittance of 50 % or higher with respect to the electromagnetic wave within the wavelength band.

43. (Previously Presented) A manufacturing method for a semiconductor device according to claim 37, wherein the substrate has a transmittance of 50 % or higher with respect to the electromagnetic wave within the wavelength band.

44. (Canceled)

45. (Currently Amended) A manufacturing method for a semiconductor device according to claim 37, wherein the insulating layer covers a top surface and a side surface of [[each of]] the semiconductor ~~layers~~ layer.

46. (Canceled)

47. (Previously Presented) A manufacturing method for a semiconductor device according to claim 37, wherein the insulating layer includes a laminate of a silicon oxide film and a silicon nitride film.

48. (Original) A manufacturing method for a semiconductor device according to claim 36, wherein the non-transparent layer having the high absorptance is formed of a high melting-point metal selected from the group consisting of molybdenum (Mo), tungsten (W), titanium (Ti), and chromium (Cr).

49. (Original) A manufacturing method for a semiconductor device according to claim 37, wherein the non-transparent layer having the high absorptance is formed of a high melting-point metal selected from the group consisting of molybdenum (Mo), tungsten (W), titanium (Ti), and chromium (Cr).

50. (Original) A manufacturing method for a semiconductor device according to claim 36, wherein the non-transparent layer having the high absorptance is formed of a metal nitride selected from the group consisting of titanium nitride (TiN), tantalum nitride (TaN), and tungsten nitride (WN).

51. (Original) A manufacturing method for a semiconductor device according to claim 37, wherein the non-transparent layer having the high absorptance is formed of a metal nitride selected from the group consisting of titanium nitride (TiN), tantalum nitride (TaN), and tungsten nitride (WN).

52. (Original) A manufacturing method for a semiconductor device according to claim 36, wherein the non-transparent layer having the high absorptance is formed of one selected from the group consisting of tungsten silicide (WSi_2), molybdenum silicide ($MoSi_2$), titanium silicide ($TiSi_2$), tantalum silicide ($TaSi_2$), chromium silicide ($CrSi_2$), cobalt silicide ($CoSi_2$), and platinum silicide ($PtSi_2$).

53. (Original) A manufacturing method for a semiconductor device according to claim 37, wherein the non-transparent layer having the high absorptance is formed of one selected from the group consisting of tungsten silicide (WSi_2), molybdenum silicide ($MoSi_2$), titanium silicide ($TiSi_2$), tantalum silicide ($TaSi_2$), chromium silicide ($CrSi_2$), cobalt silicide ($CoSi_2$), and platinum silicide ($PtSi_2$).

54. (Original) A manufacturing method for a semiconductor device according to claim 36, wherein the substrate has a transmittance of 60% or higher with respect to the incoherent electromagnetic wave within the wavelength band ranging from the visible light band to the infrared band and the non-transparent layer having the high absorptance has a transmittance of 30% or lower with respect to the incoherent electromagnetic wave within the wavelength band ranging from the visible light band to the infrared band.

55. (Original) A manufacturing method for a semiconductor device according to claim 37, wherein the substrate has a transmittance of 60% or higher with respect to the incoherent electromagnetic wave within the wavelength band ranging from the visible light band to the infrared band and the non-transparent layer having the high absorptance has a transmittance of 30% or lower with respect to the incoherent electromagnetic wave within the wavelength band ranging from the visible light band to the infrared band.

56. (Original) A manufacturing method for a semiconductor device according to claim 36, wherein the second heat treatment step is performed at a temperature not lower than a distortion point of the substrate.

57. (Original) A manufacturing method for a semiconductor device according to claim 37, wherein the second heat treatment step is performed at a temperature not lower than a distortion point of the substrate.

58.-73. (Canceled)

74. (Currently Amended) A manufacturing method for a semiconductor device, comprising:

forming a semiconductor layer over a substrate;

forming an insulating layer over the semiconductor layer wherein said semiconductor layer includes a region to become at least a channel region of a thin film transistor;

forming a conductive layer over the semiconductor layer with the insulating layer interposed therebetween;

selectively heating the semiconductor layer by using a heat source capable of radiating an incoherent electromagnetic wave within a wavelength band ranging at least from a visible light band to an infrared band; and

etching said conductive layer after the selective heating of the semiconductor layer to form a gate electrode over the semiconductor layer,

wherein said conductive layer extends beyond a periphery of the semiconductor layer at least when the selective heating of the semiconductor layer is performed.

75. (Previously Presented) A manufacturing method for a semiconductor device according to claim 74, wherein a transparency of said substrate with respect to said incoherent electromagnetic wave is 50% or larger.

76. (Previously Presented) A manufacturing method for a semiconductor device according to claim 74, wherein said substrate is a glass substrate.

77. (Previously Presented) A manufacturing method for a semiconductor device according to claim 74, wherein said substrate is selected from one of quartz and sapphire.

78. (Previously Presented) A manufacturing method for a semiconductor device according to claim 74, wherein the conductive layer comprises a metal nitride.

79. (Currently Amended) A manufacturing method for a semiconductor device according to claim 74, further comprising forming a second conductive layer on the conductive layer ~~for forming at least a part of a gate electrode~~.

80. (Previously Presented) A manufacturing method for a semiconductor device according to claim 74, wherein the selective heating of the semiconductor layer is performed at a temperature not lower than a distortion point of the substrate.

81. (Canceled)

82. (Currently Amended) A manufacturing method for a semiconductor device, comprising:

heating an entire surface of a substrate by radiation heating from a first heat source;

forming a semiconductor layer over [[a]] the substrate;

forming an insulating layer [[over]] on the semiconductor layer wherein said semiconductor layer includes a region to become at least a channel region of a thin film transistor;

forming a conductive layer on ~~over the semiconductor layer with~~ the insulating layer ~~interposed therebetween~~; and

selectively heating the semiconductor layer by using a second heat source capable of radiating an electromagnetic wave within a wavelength band ranging at least from a visible light band to an infrared [[band]] band,

wherein the semiconductor layer is covered by the conductive layer when the semiconductor layer is selectively heated.

83. (Previously Presented) A manufacturing method for a semiconductor device according to claim 82, wherein the selective heating of the semiconductor layer is

performed by using the second heat source capable of radiating an incoherent electromagnetic wave.

84. (Previously Presented) A manufacturing method for a semiconductor device according to claim 82, wherein the substrate is a glass substrate.

85. (Previously Presented) A manufacturing method for a semiconductor device according to claim 82, wherein the conductive layer is formed of a metal selected from the group consisting of molybdenum (Mo), tungsten (W), titanium (Ti), and chromium (Cr).

86. (Previously Presented) A manufacturing method for a semiconductor device according to claim 82, wherein the conductive layer is formed of a metal nitride selected from the group consisting of titanium nitride (TiN), tantalum nitride (TaN), and tungsten nitride (WN).

87. (Previously Presented) A manufacturing method for a semiconductor device according to claim 82, wherein the conductive layer is formed of one selected from the group consisting of tungsten silicide (WSi_2), molybdenum silicide ($MoSi_2$), titanium silicide ($TiSi_2$), tantalum silicide ($TaSi_2$), chromium silicide ($CrSi_2$), cobalt silicide ($CoSi_2$), and platinum silicide ($PtSi_2$).